AMENDMENTS TO THE CLAIMS

Please amend the Claims as follows:

1. (Currently Amended) A release mechanism between a projectile and a rocket motor in a missile, ~~where the projectile is released from the rocket motor during the flight of the missile when the rocket motor is burned out and retardation occurs,~~ wherein the rocket motor in the front end thereof comprises

a forward closure,

one lock retainer ring received in the forward closure so as to be axially movable ~~received and movable lock~~,

at least one lock, and

at least one spring that biases against the lock retainer ring in a direction opposite to the direction of travel for the missile,

and wherein the projectile in the rear end thereof has a central boss surrounded by the forward closure of the rocket motor, wherein the boss comprises recesses ~~or a circumferential groove~~ in which the at least one lock lies and keeps the forward closure and boss axially together, and wherein, when the rocket motor burns out, retardation occurs inducing the lock retainer ring to move forward so as to release the at least one lock and release the projectile from the rocket motor.

2. (Previously Presented) The release mechanism of Claim 1, wherein the lock is in the form of a ball.

3. (Withdrawn) The release mechanism of Claim 1, wherein the lock is in the form of a rod, a chip, a lug, or a button.

4. (Withdrawn) The release mechanism of Claim 1, wherein the lock retainer comprises a retaining ring having a continuous internal retainer race.

5. (Withdrawn) The release mechanism of Claim 4, wherein the lock retainer comprises a ball retaining ring having a continuous internal ball retainer race.

6. (Currently Amended) The release mechanism of Claim 1, wherein the lock retainer ring comprises a number of separated, axially projecting retainers.

7. (Currently Amended) The release mechanism of Claim 6, wherein the lock retainer ring comprises an annular part and a number of separated, axially projecting ball retainers.

8. (Previously Presented) The release mechanism of Claim 1, wherein the boss is hollow and cylindrical.

9. (Previously Presented) The release mechanism of Claim 1, wherein the forward closure comprises a polar boss and a forward motor closure that are threaded together and a seal interposed therebetween.

10. (Previously Presented) The release mechanism of Claim 1, wherein the projectile is a penetrator.

11. (Currently Amended) A missile comprising:

a rocket motor that includes a casing wherein the rocket motor propels the missile;

a projectile that is coupled to the rocket motor and is separable therefrom; and

a release mechanism interposed between the projectile and the rocket motor wherein the release mechanism includes:

at least one locking member;

a locking member retainer that ~~is coupled~~ couples the at least one locking member to both the projectile and the rocket motor; and

a spring biasing member that engages with the ~~at least one~~ locking member retainer so as to maintain the at least one locking member in engagement between the rocket motor and the projectile,

wherein the spring biasing member is biased in the direction opposite the motion of the missile such that when the rocket motor ceases propelling the missile, the force of the spring biasing member is inertially overcome thereby allowing the locking member retainer to ~~disengage~~ move forwards so as to decouple the at least one locking member between the projectile and the rocket motor thereby releasing the projectile from the rocket motor.

12. (Currently Amended) The missile of Claim 11, wherein, ~~the release mechanism further comprises a movable locking retainer that engages with the at least one locking member and the spring biasing member such that~~ when the rocket motor ~~disengages~~ burns out, retardation induces the movable locking member retainer ~~compresses~~ to inertially compress the spring biasing member thereby permitting the at least one locking member to disengage between the projectile and the rocket motor.

13. (Currently Amended) The missile of Claim 12, wherein the ~~rocket motor~~ missile includes one or more recesses in which the at least one locking members are captured, wherein the spring biasing member engages with the movable locking member retainer so as to retain the at least one locking members within the ~~recess~~ recesses to secure the projectile and rocket motor together.

14. (Currently Amended) The missile of Claim 13, wherein the at least one locking member comprises a plurality of balls positioned within ~~the~~ corresponding recesses.

AMENDMENTS TO THE DRAWINGS

The enclosed "Replacement Sheet" illustrates an enlarged Figure 3. The enclosed drawing is being submitted in order to more clearly illustrate shapes, relationships, etc. between the elements 7, 7', 17, 18, 4, 6, 14, 3, 2, and 13 in response to the objections to the drawings by the Examiner in the Office Action. Applicant respectfully requests that the previously submitted Figure 3 be replaced by that which is enclosed herewith. No new matter is being entered herewith.